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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,492	06/28/2001	Alan Anderson Hoover	RCA 89855	4186

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EXAMINER

MICHALSKI, JUSTIN I

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/869,492

Applicant(s)

HOOVER, ALAN ANDERSON

Examiner

Justin Michalski

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 10, 15, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Schott (US Patent 5,892,831).

Regarding Claims 1 and 15, Schott discloses a method and apparatus for a stereophonic expansion circuit, comprising: means for processing (L+R) and (L-R) signals (Fig. 1, references 10 and 12), and means for providing tonal compensation for the (L+R) signal by increasing an amplitude for the (L+R) signal in a bass frequency band (Fig. 3, curve A, increasing amplitude around 250Hz) relative to a mid-range frequency band (approximately 600Hz).

Regarding Claims 2 and 16, Schott further discloses the tonal compensation is further provided by increasing the amplitude of the (L+R) signal in a treble frequency band (Fig. 3, curve A, around 1050 Hz) relative to the mid-range frequency band (approximately 600Hz).

Regarding Claim 3, Schott further discloses the (L-R) signal is processed by increasing an amplitude of the (L-R) signal in the mid-range frequency band (Fig. 3, curve B).

Regarding Claim 4, Schott further discloses the (L+R) signal is tonally compensated to be complementary to a frequency curve of the (L-R) signal (Fig. 3, curves A and B).

Regarding Claim 10, Schott discloses a stereophonic expansion circuit having (L+R) and (L-R) signal paths (Fig. 2, references 20 and 22) including circuitry operative to provide tonal compensation for the (L+R) signal path by increasing an amplitude of an (L+R) signal in a bass frequency band (Fig. 5, curve I, increasing amplitude around 250Hz) and a treble frequency band (Fig. 5, curve I, around 1050 Hz) relative to a mid-range frequency band (approximately 600Hz), and wherein the tonal compensation of the (L+R) signal path is approximately complementary to a tonal frequency response of the (L-R) signal path (Fig. 3, curves A and B).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-9, 11-14, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schott as applied to claim 1 above in view of Lendaro et al. (Hereinafter "Lendaro") (US Patent 5,208,493).

Regarding Claims 5, 11, and 17 Schott discloses a device as stated above but does not disclose tonal compensation can be switched between "on" and "off" modes. Lendaro discloses a stereo expansion selection switch (Figs. 1-3) to allow a user to selectively actuate or deactuate the stereo expansion circuitry of an audio system (Col. 1, lines 6-9). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an "on" and "off" switch in order to allow a user to selectively actuate or deactuate the stereo expansion circuitry of an audio system as taught by Lendaro.

Regarding Claims 6, 12, and 18 Lendaro further discloses stereophonic expansion can be switch between "on" and "off" modes and the tonal compensation is switched "off with the stereophonic expansion is switched "off" (Figs. 1-3).

Regarding Claims 7, 13, and 19 Schott further discloses gain boost (Figs. 3 and 5).

Regarding Claims 8, 14, and 20 Lendaro further discloses the tonal compensation and expansion are "off" when switched "off".

Regarding Claim 9, Schott further discloses the tonal compensation for the (L+R) signal is provided with respect to the (L-R) signal (Fig. 1, phase shifter 14).

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2644

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM



October 20, 2005



VIVIAN CHIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600